

31. Three times a number, increased by 5, is the same as twice the number increased by 10. Find the number.

32. Six more than four times a number gives the same result as when 8 is added to three times the number. Find the number.

29. Pete had 13 pesos in singles and two coins. Jose had a one-peso bill and four of the same coins that Pete had. They both had the same amount of money. What was the value of each of the coins?

7-1**Skills Practice*****Solving Equations with Variables on Each Side***

Solve each equation. Check your solution.

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|---------------------------|--------------------------|
| 1. $3x + 2 = 5x$ | 2. $n - 12 = 3n$ |
| 3. $2 - 3b = 7b + 12$ | 4. $4d - 11 = 2d + 7$ |
| 5. $2f + 3 = 11f - 24$ | 6. $8y + 11 = 2y + 29$ |
| 7. $5a = 45 + 2a$ | 8. $17 - 3c = 4c + 3$ |
| 9. $2a - 3 = 9a - 10$ | 10. $5b = 21 + 4b$ |
| 11. $9y - 27 = -2y + 6$ | 12. $2n - 5 = 7n$ |
| 13. $-s + 3 = 5s + 21$ | 14. $7 - 4c = 3c + 35$ |
| 15. $30 - 2n = 4n$ | 16. $29 + 7d = 5d + 15$ |
| 17. $16k - 23 = 6k - 13$ | 18. $w - 20 = 6w$ |
| 19. $33g + 28 = 25g - 12$ | 20. $6h - 34 = -6h + 14$ |
| 21. $3t + 17 = t - 3$ | 22. $11j = 6j - 15$ |
| 23. $c - 2 = 3c + 14$ | 24. $28x - 7 = 26x + 5$ |
| 25. $5m - 6 = 8m + 9$ | 26. $-4p - 7 = 5p + 11$ |
| 27. $-10 + 3f = 5f + 6$ | 28. $4f + 6 = 8f - 14$ |
| 29. $-7n - 16 = 4n + 17$ | 30. $5d = 9d - 18$ |

Define a variable and write an equation to find each number. Then solve.

31. Three times a number equals 40 more than five times the number. What is the number?
32. A number equals four less than three times the number. What is the number?
33. Eight times a number equals 24 more than two times the number. What is the number?